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(54) Floor divider strip

(57) The invention provides a floor divider strip body of relatively inexpensive material, such as plastics or aluminium, with an upper edge of an enhanced appearance. This is achieved by providing the upper edge as a decorative edge strip (2) (which could be of relatively expensive material such as brass) which is positively fixed to the upper edge of the strip body (1) by a tongue and groove (3, 4, 6, 7).

The groove can be formed with at least one splayed-out wall (8, 9) which is pressed into longitudinal engagement with a corresponding wall of the tongue (6, 7) eg by traversing the wall with a pressure roller.

An insulating layer (12) can be provided to prevent any chemical reaction where the strip body and edge strip are of dissimilar metals.

FIG.1

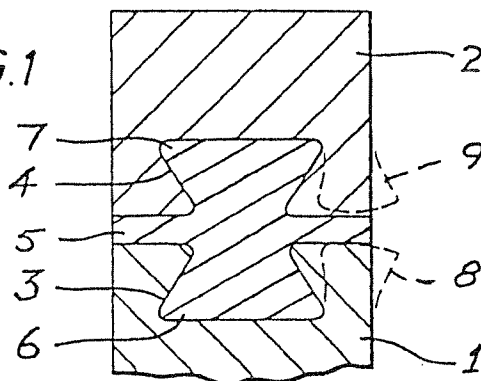
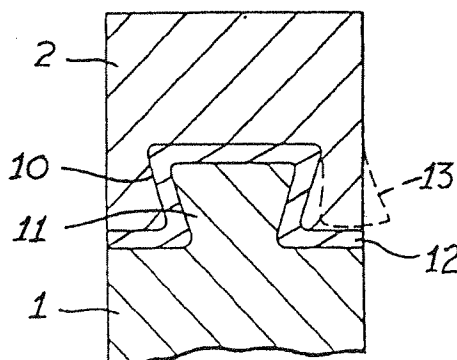


FIG.2



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1982.

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FIG.1

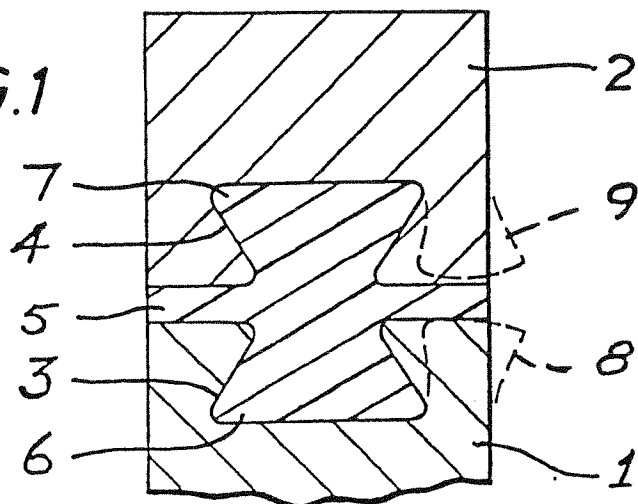


FIG.2

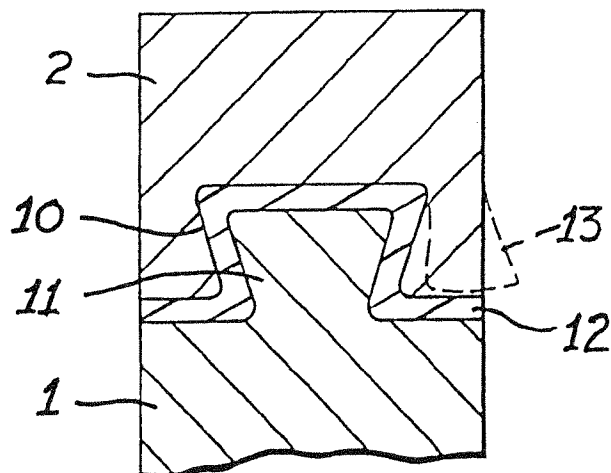
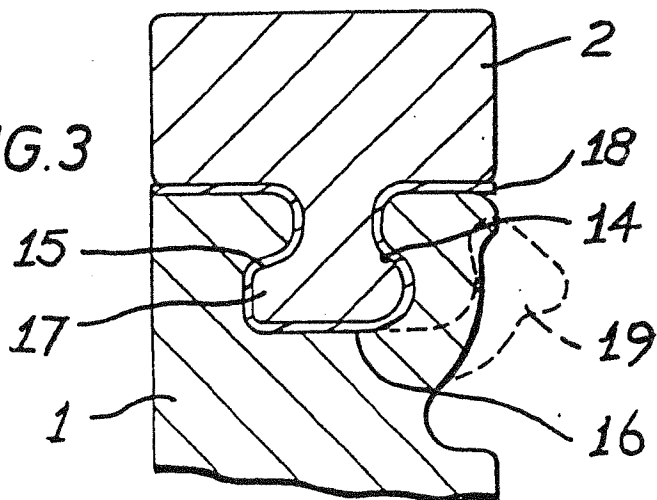


FIG.3



Floor Divider Strips

This invention relates to floor divider strips. Such strips are used extensively with large tiled floor areas to divide them into sections. This provides the advantage that any movement of the underlying surface, which will cause compensating movement of the tile sections, tends to be concentrated along the lines of the divider strips. Hence, the tile sections as a whole tend to move relatively to the divider strips and relative movement between individual tiles, which could lead to tile breakages is thereby avoided. It will be appreciated that, once in position, only the upper edges of the divider strips are visible. Because there is normally a preference for the edges to present a brass appearance, the strips tend to be of this material, which of course is a relatively expensive metal. Furthermore, it may be that the appearance of the upper edges provided by the divider strips does not blend in with the surroundings, or suit the aesthetic requirements of the designer.

An object of this invention to provide a divider strip which can be made of a relatively inexpensive material, eg plastics or a metal such as aluminium, and in which the upper edges of the strips can be readily provided to suit the intended surroundings.

According to this invention, a divider strip of the kind discussed above is characterised in that the strip is extruded from relatively inexpensive material, and in that the upper edge of the strip is shaped to provide a keying

surface to which a decorative edge strip having a mating surface is affixed, said keying and mating surfaces providing at least one co-operating tongue and groove.

5 Preferably, the co-operating tongue and groove is generally of dovetail form in cross-section, ie the co-operating side walls at least on one side of the tongue and groove are inclined, or shaped, to provide a positive fixing against being pulled apart.

10 In some applications, particularly where two dissimilar metals are used for the divider strips and edge strips, a chemical reaction may be expected, e.g. galvanic corrosion between divider strips of aluminium alloys and edge strips of copper alloys, an interposing protective insulating layer may be provided.

15 Where the divider strips and edge strips are fixed together via a dovetail tongue and groove, preferably one of the side walls defining the groove is splayed outwardly during forming so that, during assembly, the co-operating tongue and groove can be readily fitted together and the side wall thereafter crimped inwardly into longitudinal engagement with the corresponding side wall of the tongue to provide said positive fixing.

20 In order that the invention may be readily understood, three embodiments will now be described with reference to the accompanying drawings, in which:

25 Figures 1 to 3 respectively are sectional views of the three embodiments at the point where the divider and edge strips are joined.

Referring to Figures 1 to 3, the embodiments

described are in respect of divider strips 1 of aluminium and decorative edge strips 2 of brass.

Alternatively, the edge strip 2 may either be of another metal, e.g. a copper alloy, or of a suitable plastics material of an appropriate colour.

Referring to Figure 1, in the first embodiment, the divider and edge strips each have a symmetrical dovetail groove 3, 4 formed therein and an interposing layer 5 is provided as a reinforced plastics extrusion with co-operating dovetail shaped tongues 6, 7 projecting from each of its faces. The components may be fixed by forming the decorative edge strip 2 and divider strip 1 with respective splayed-out side walls 8, 9 which can be crimped against the corresponding side wall of the co-operating dovetail tongue. In this way other fixing means, such as an adhesive is not required for positive fixing. If preferred, the divider and edge strips can each be formed with both side walls splayed-out, which are then crimped from respective sides into engagement with their respective tongues.

Referring to Figure 2, in the second embodiment, a symmetrical dovetail groove 10 is formed in the edge strip 2 and a co-operating tongue 11 in the divider strip 1 and the two metals are separated from each other by a suitably shaped plastics extrusion 12, or insulting tape. As in the first embodiment, the components may be fixed together by crimping. However, it will be appreciated that only the edge strip 2 would be provided with a splayed-out side wall, or walls 13.

Referring to Figure 3, in the third embodiment, an assymmetrical dovetail joint is provided, having differently shaped side walls 14, 15, the groove 16 being formed in the divider strip and co-operating tongue 17 in the decorative edge strip 2. This arrangement facilitates interposing the insulation layer 18, which in this case is insulting tape, by adhering one side of the tape onto and around the tongue 17 before it is fitted into the groove, which has only one splayed-out wall 19 shaped to mate with the shape of its corresponding tongue side wall 14.

The third embodiment described above is particularly suitable where the divider strip 1 is of aluminium and the edge strip 2 is of brass. However, it will be appreciated that if the divider strip 1 is of plastics, then the insulation layer 18 would not be required. Also, since the plastics would not be malleable, the tongue 17 and groove 16 would be reversed, ie the groove 16 would be formed on the lower edge of the strip 2 so that its splayed-out wall 19 would be pressed into contact with the tongue 17 formed on the upper edge of the divider strip 1.

It will be appreciated that, in a production line, the divider and edge strips would be formed by joining extruded lengths of said strips together and then cutting them to lengths appropriate to the dimensions required for the floor sections. Where each strip is formed with splayed-out walls, crimping would be effected by traversing along the length of each splayed-out wall with a pressure roller or rollers to move the wall into longitudinal contact with its corresponding tongue side wall.

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CLAIMS

1. A floor divider strip for dividing floor areas into sections, characterised in that the body of the strip is formed from a relatively inexpensive material, in that the upper edge of the strip body is shaped to provide a keying surface to which a decorative edge strip having a mating surface is affixed, and in that said keying and mating surfaces provide at least one cooperating tongue and groove.
2. A divider strip according to Claim 1, characterised in that the cooperating tongue and groove is generally of dovetail form in cross-section.
3. A divider strip according to Claim 2, characterised in that at least one of the side walls defining the groove is formed splayed-outwardly, and in that, for assembly, the cooperating tongue and groove is fitted together and said wall(s) is thereafter crimped inwardly into longitudinal engagement with the corresponding side wall of the tongue to provide a positive fixing.
4. A divider strip according to Claim 3, further characterised in that the tongue and groove is symmetrical in cross-section, the groove is provided on the decorative edge strip, and the tongue is provided on the strip body.
5. A divider strip according to Claim 3, further characterised in that the tongue and groove is asymmetrical in cross-section, the opposed side walls being of different shape.
6. A divider strip according to Claim 5, further characterised in that the tongue is formed on the decorative edge strip.

7. A divider strip according to any preceding Claim, further characterised in that the strip body is extruded from a relatively inexpensive plastics or metal, and in that the decorative edge strip is formed of a relatively expensive plastics or metal.
8. A divider strip according to Claim 7, further characterised in that said strip body and decorative edge strip are of dissimilar metals, and in that a protective insulating layer is provided to prevent any chemical reaction between them.
9. A divider strip according to Claim 8, further characterised in that the insulating layer is in the form of a tape which is adhered on one side onto and around the tongue before fitting into its cooperating groove.
10. A divider strip according to Claim 2 and any claim dependent thereon, further characterised in that crimping of the or each splayed-out wall is effected by applying pressure along the length of said wall to move it into longitudinal contact with its corresponding tongue side wall.
11. A floor dividing strip for dividing a floor area into sections constructed, arranged, and adapted for use substantially as hereinbefore described with reference to Figure 1, 2, or 3 of the accompanying drawing.